

ABSTRACT OF THE DISCLOSURE**BARCODE SINGLE LASER SCANNER TARGETING**

5 A robot apparatus and a barcode scanner to be used
for collecting positional data parallel to the scan
direction in, for example, a library storage system is
provided. In one embodiment, the robotic apparatus
includes a barcode scanner having a scan path and an
10 attenuation surface within the scanner scan path. The
barcode scanner scans the target while the robotic
apparatus is moved in a direction parallel with the scan
path. Positional data is collected in conjunction with
the readability limits of the barcode target. The
15 central position of the target in a parallel direction to
the scan path is determined based on the readability of
the barcode target and the correlating positional data.
The barcode scanner can also scan the target while the
robotic apparatus is moved in a direction perpendicular
20 with the scan path. Positional data is collected in
conjunction with the readability limits of the barcode
target. The central position of the target in a
perpendicular direction to the scan path is determined
based on the readability of the barcode scanner and the
25 correlating positional data.